In the Claims:

Please amend the claims as follows:

1. (currently amended) A method of controlling an industrial robot, comprising a control unit and a manipulator including a tool with a tip comprising a defined tool center point, ~~for~~ the method comprising:

determining an actual position of the tip of the tool corresponding to an inaccurate programmed position for a spot on a surface of a work piece, ~~the method comprising:~~

bringing the tip of the tool to be moved from a first programmed position at a distance from the surface in a defined direction towards the work piece,

bringing the tip to collide with the surface at a collision point, and

computing the actual position from the distance between the collision and the first programmed position in the defined direction of movement.

2. (previously amended) The method according to claim 1, further comprising:

moving the tool towards a second position programmed to be positioned behind the work piece seen in the direction of movement.

3. (previously amended) The method according to claim 1, further comprising:

stopping the movement of the tip when a created force between the work piece and the tip has increased to a predefined value.

4. (previously amended) The method according to claim 3, further comprising:

detecting the created force by supervising motor torques of axes of the robot.

5. (previously amended) The method according to claim 3, further comprising:

controlling the created force by soft servo.

6. (currently amended) The ~~Use of the~~ method according to claim 1, further comprising: ~~when~~

setting up an industrial robot spot welding cell.

7. (currently amended) A method of controlling an industrial robot comprising a control unit and a manipulator including a tool comprising a defined tool center point, ~~for~~ the method comprising:

determining a distance error between an offline programmed position for a target on a surface of a calibration plate and a corresponding actual position due to wear of the tool, with the tool orientation normal to the surface, ~~the method comprising~~

moving the robot from a first start position with the tool orientation normal to the surface such that the tool is brought in touch with the surface of the calibration plate creating an actual position of the target,

reading an actual tool center point position to define a coordinate system,

computing two reference distances, wherein a first of the reference distances is computed as a difference ~~from differences~~ between the tool center point positions of the actual position of the target and the first start position, and a second distance is computed as a difference between

the programmed position for the target and the first start position, and

computing a wear by the difference of the two reference distances.

8. (previously amended) The method according to claim 7, further comprising:

applying a pose transformation to a tool data transformation to correct for the wear.

9. (previously amended) The method according to claim 8, further comprising:

storing a tool data transformation in a memory of the control unit and using the tool data transformation for the next welding operation.

10. (previously amended) The method according to claim 7, further comprising:

moving the robot in normal control servo mode.

11. (currently amended) The method according to ~~claim 7~~ claim 10, further comprising:

moving the robot in soft servo mode.

12. (currently amended) A method in an industrial robot system comprising an industrial robot, including a control unit and a manipulator with a tool comprising a defined tool center point, and a level ~~indicating means for determining~~ indicator configured to determine a reference distance, the method comprising:

bringing the level ~~indicating means~~ indicator to comprise a movably attached plate, during movement of the robot,

bringing ~~the tool~~ a tool tip to ~~elevate~~ move the movable plate into a programmed

reference position below a stop level,

bringing the tool tip to elevate the movable plate from the reference position into an upper stop position creating an actual position,

reading an actual tool center point position ~~is read~~, and

computing a reference distance from the difference between the actual tool center point position and the reference position.

13. (previously amended) The method according to claim 12, further comprising:

storing the reference difference in a memory of the control unit.

14. (previously amended) The method according to claim 12, further comprising:

determining the wear of the tool after a number of production cycles through computing a difference between the reference distance and an actual distance.

15. (currently amended) The method according to claim 14, further comprising:

bringing the tool to comprise a first gun arm and a second gun arm, each gun arm comprising a tool tip,

bringing the gun tool with the tool tips to be closed in ~~its closed~~ a closed work position and in a reference position,

moving the gun tool into an upper stop position, thereby creating an actual position, and

using the reference distance, the current tool wear and the actual distance for computing the gun arm bending in the gun tool in ~~its closed~~ a closed work position.

16. (currently amended) An industrial robot system, comprising:

an industrial robot;

a robot tool; and

a level ~~indicating means~~ indicator comprising a movably attached plate arranged to be moved by a tool tip of the tool.

17. (currently amended) The ~~device~~ system according to claim 16, wherein the level ~~indicating means~~ indicator is arranged to comprise a plate movement limiting device including a first fixed stop defining an elevation stop level.

18. (currently amended) The ~~device~~ system according to claim 17, wherein the plate movement limiting device is arranged to comprise a second fixed stop defining a lowering stop level.

19. (currently amended) The ~~device~~ system according to claim 16, wherein the movable plate is arranged with a spring suspension.

20. (currently amended) The ~~device~~ system according to claim 16, wherein the movable plate is adapted to pivot about an axis.

21. (currently amended) A computer program product, comprising:

a non-transitory computer readable medium; and

computer program instructions recorded on the computer readable medium to influence a

processor to carry ~~the steps of~~ out a method comprising determining an actual position of a tip of a tool corresponding to an inaccurate programmed position for a spot on a surface of a work piece, bringing ~~a tip of a tool~~ the tip of the tool to be moved from a first programmed position at a distance from a surface in a defined direction towards a work piece, bringing the tip to collide with the surface at a collision point, and computing an actual position from the distance between the collision and the first programmed position in the defined direction of movement.

22. (canceled)

23. (currently amended) The ~~Use of a~~ method according to claim 1, further comprising:

carrying out a process working in specific positions with the industrial ~~an industrial~~ robot, manipulator and tool ~~device~~ or a computer program product ~~for carrying out any process working in specific positions~~.

24. (currently amended) The ~~use~~ method according to claim 23, wherein the process for working in specific positions is any of the following methods of joining: spot welding, riveting, or clinching.

25. (currently amended) The ~~use~~ method according to claim 23, wherein the process utilizes ~~in processes comprising~~ laser fiber.

26. (currently amended) The system ~~Use of a method in an industrial robot device~~ according to claim 16, wherein the system is configured to carry ~~or a computer program product~~

~~for carrying~~ out any process working in specific positions.

27. (currently amended) The ~~Use of a method, an industrial robot device or a~~ computer program product according to claim 21, wherein the computer program instructions further influence the processor to carry ~~for carrying~~ out any process working in specific positions.

28. (new) The method according to claim 7, further comprising:

carrying out a process working in specific positions with the industrial robot, manipulator and tool or a computer program product.

29. (new) The method according to claim 12, further comprising:

carrying out a process working in specific positions with the industrial robot, manipulator and tool or a computer program product.